

IN THE CLAIMS

Claims 1-5, 7, 8 and 10-14 are amended. Claims 6, 9 and 14 are cancelled, all as follows.

1. (Currently Amended) A noninvasive ~~and remote~~ method of identifying and measuring ~~at~~ the neurological manifestation in human speech of an early ~~non-tremor~~ phase of ~~Parkinson's and other~~ neuro disease including diseases comprising:

converting a human subject's spoken words into corresponding electrical signals;

amplifying said electrical signals;

frequency band limiting, and signal conditioning the said electrical signals to produce modified signals;

determining ~~an~~ the envelope of said modified signals;

determining ~~at~~ the spectral density of said modified signals and providing to
provide a spectral density signal;

smoothing said spectral the density signal;

determining ~~at~~ the spectral envelope of said the smoothed spectral density signal;

determining the presence of a depression in said spectral envelope;

determining ~~an~~ the amplitude of said depression with reference to ~~an~~ the average db level of two shoulder peaks in said spectral density signal on either side of said depression; ~~and~~

determining ~~at~~ the ratio of said the amplitudes of said the depression and said average db level of said two shoulder peaks[.]; and

using said ratio for identifying and measuring a neurological manifestation in the

subject's spoken word, of early phases of neuro disease.

2. (Currently Amended) The method of claim 1, further including multiplying said ratio by a constant k to obtain a Parkinson Severity Index ~~for Parkinson.~~

3. (Currently Amended) The method of claim 12, further including ~~means for~~ determining a compressed range for said Parkinson Severity Index by selecting a narrow bandwidth corresponding to ~~at the~~ first format of said electrical signals ~~speech~~ signal.

4. (Currently Amended) The method of claim 12, further including converting said spoken words using ~~via telephony computer boards for on-the-telephone interactive~~ operation.

5. (Currently Amended) The method of claim 12, further including detecting ~~detections~~ parameters corresponding to Parkinson neuro disorders.

6. (Cancelled)

7. (Currently Amended) The method of claim 2, further including separating ~~Parkinson's diseases~~ separation of Parkinson from said ~~neuro atrophy or dyskinesia and brain cell damage and other~~ neuro disorders, by using different constants ~~parameters~~ than those of Parkinson.

8. (Currently Amended) The method of claim 12, further including using said ratio and providing prediagnostic assistance to a physician for use in treating said neuro diseasedisorders.

9. (Cancelled)

10. (Currently Amended) The method of claim 12, further including using said ratio and detecting brain cell damage.

11. (Currently Amended) The method of claim 12, further including using said ratio and detecting dykinesia.

12. (Currently Amended) The method of claim 12, further including using said ratio and detecting neuro atrophy.

13. (Currently Amended) The method of claim 12, further including using said ratio and detecting neuropathy.

14. (Cancelled)